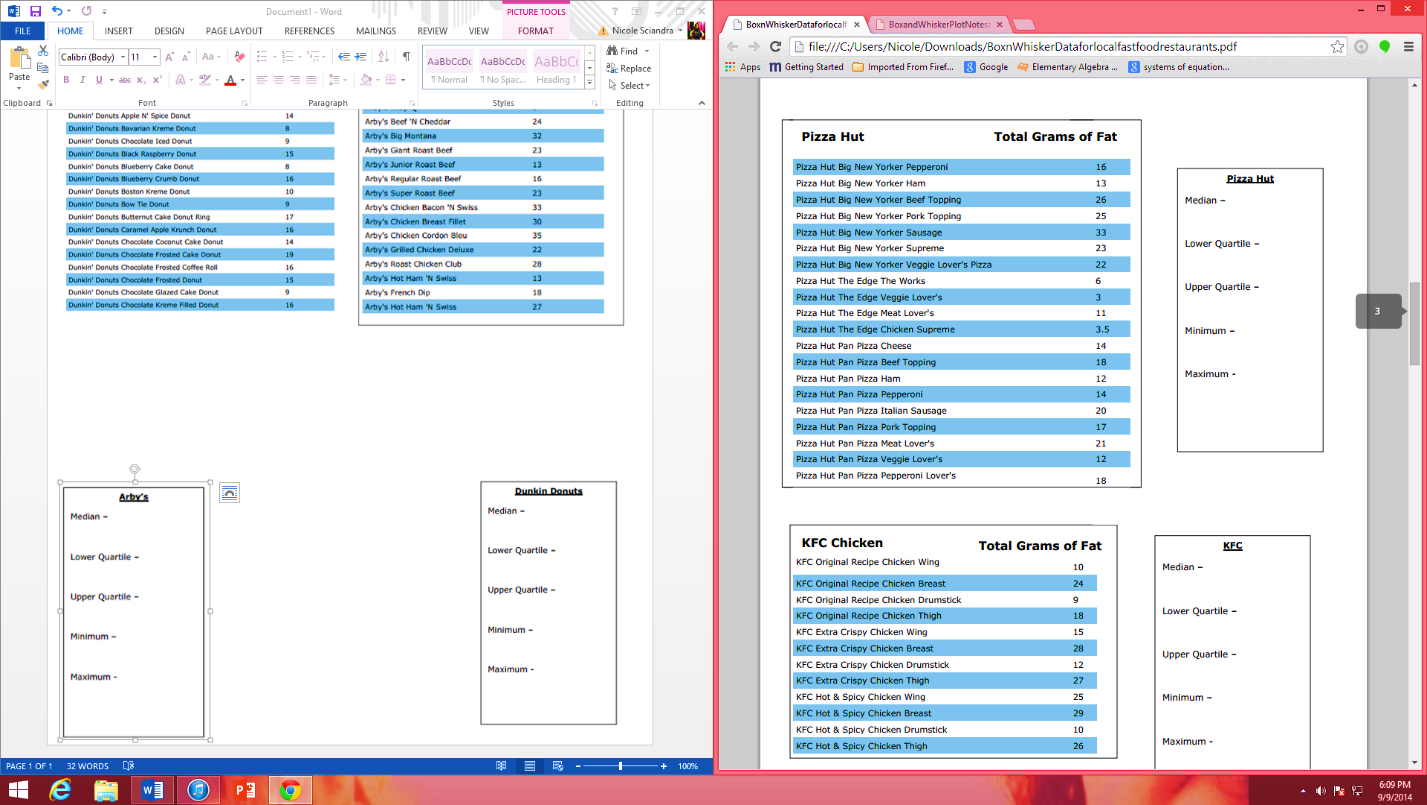
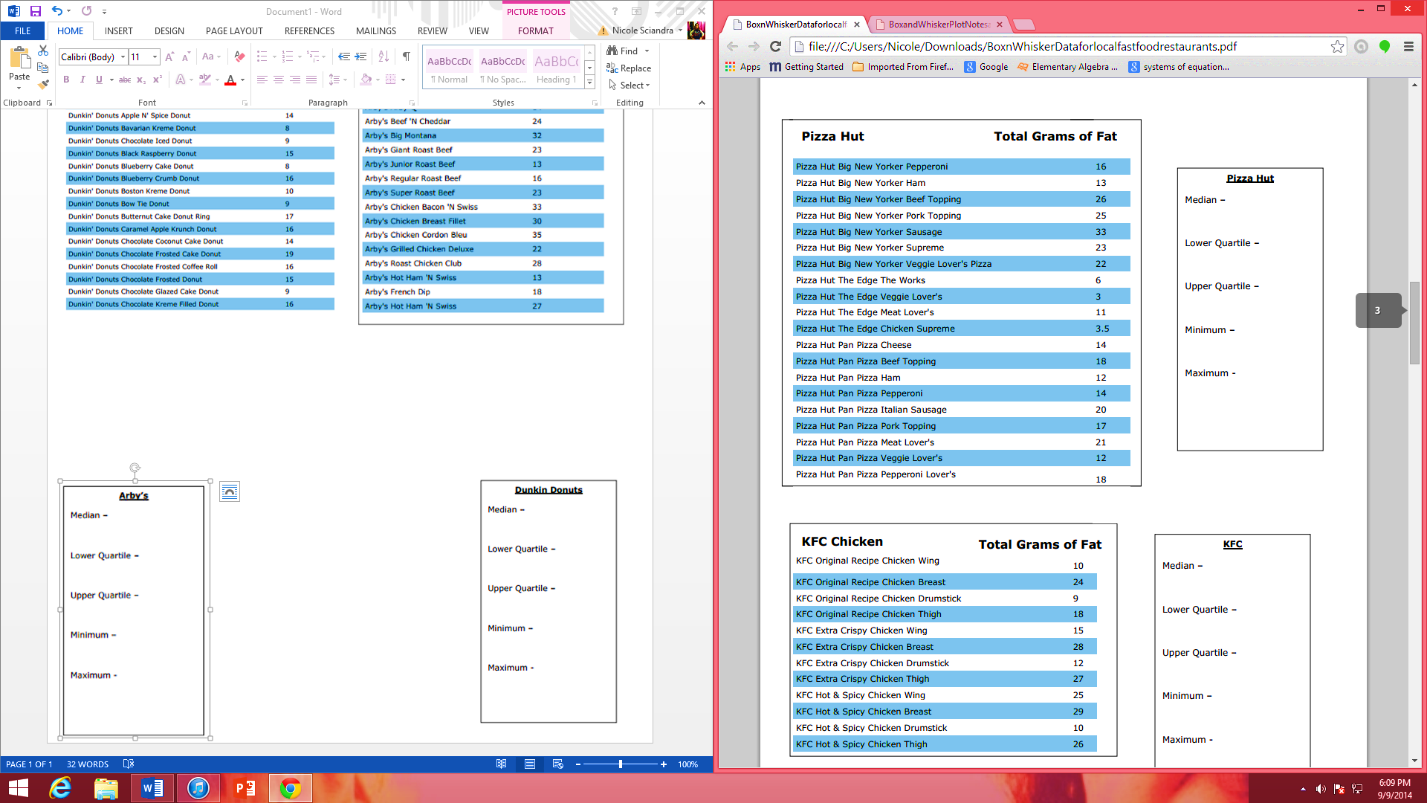
**Directions:** Find the five number summaries for the total fat grams in foods served by each restaurant. Construct a box-and-whisker plot for all 4 sets of data on the same number line.



|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **5 Number Summary** | **Minimum** | **Lower Quartile** | **Median** | **Upper Quartile** | **Maximum** |
| ***Dunkin*** |  |  |  |  |  |
| ***Arby’s*** |  |  |  |  |  |
| ***Pizza Hut*** |  |  |  |  |  |
| ***KFC*** |  |  |  |  |  |

**2) Construct a boxplot for each company using the same interval below:**

**Total fat content**

***Dunkin’***

***Donuts***

***Arby’s***

***Pizza***

***Hut***

***KFC***

**40**

**0**

**3) Answer the following questions using your graphs and 5 number summaries**

a) What is the smallest minimum on your number line? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) What is the largest maximum on your number line? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c) Comparing ONLY the medians, which fast food is the fattiest? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d) Which restaurant has the highest fat content? \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Lowest?\_\_\_\_\_\_\_\_\_\_\_\_\_\_

e) Which restaurant has the largest IQR ? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ What is it? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

f) Which restaurant has the smallest IQR? \_\_\_\_\_\_\_\_\_\_\_\_\_ What is it?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

g) If you had to eat one thing from **each** restaurant for the same meal, what would be your most healthiest choices?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

h) If you had to eat one thing from **each** restaurant for the same meal, what would be your

most unhealthiest choices?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4) 15, 12, 19, 15, 16, 13, 15

|  |  |  |  |
| --- | --- | --- | --- |
| **Mean** | **Median** | **Mode** | **Range** |
|  |  |  |  |

5) 105, 106, 101, 101, 106, 111, 111, 116, 106

|  |  |  |  |
| --- | --- | --- | --- |
| **Mean** | **Median** | **Mode** | **Range** |
|  |  |  |  |

6) 4, 3, 2, 4, 6, 6, 4, 3, 3, 4, 5

|  |  |  |  |
| --- | --- | --- | --- |
| **Mean** | **Median** | **Mode** | **Range** |
|  |  |  |  |

7) 2,334 4,551 3,410 2,334 3,471

|  |  |  |  |
| --- | --- | --- | --- |
| **Mean** | **Median** | **Mode** | **Range** |
|  |  |  |  |

8) What’s the formula for finding IQR?

9) How do you find Q1 and Q3 of the five number summary?

10) Angela recorded the ages of the people in sales and the people in accounting at her company below.

|  |  |
| --- | --- |
| Sales: | 31, 30, 28, 35, 39, 36, 33 |
| Accounting: | 37, 40, 38, 35, 41, 45, 43 |
|  |  |

How does the interquartile range of the ages of the people in sales **compare** to the interquartile range of the ages of the people in accounting?